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Defined Effectors of Biological Responses

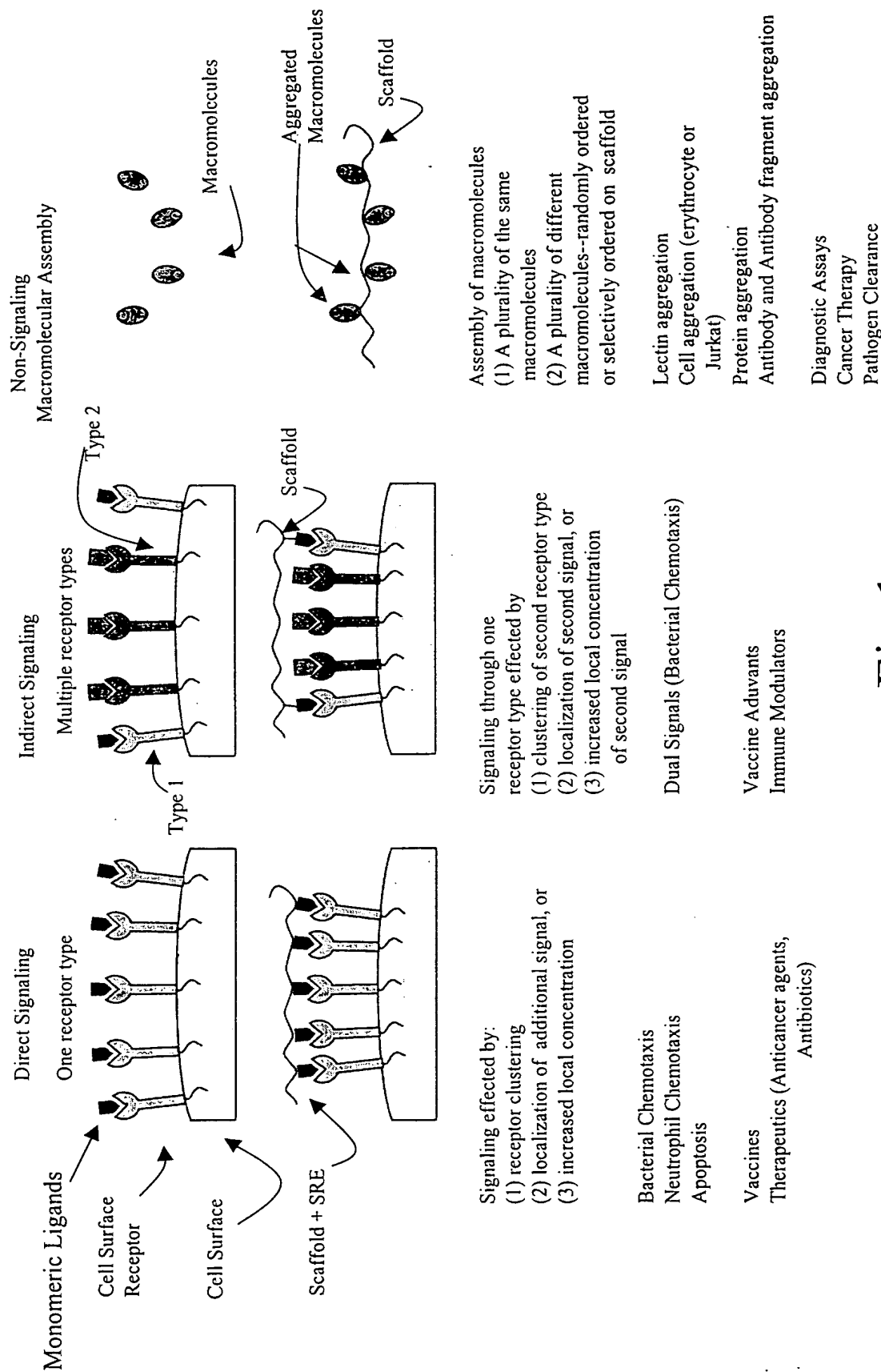


Fig.1

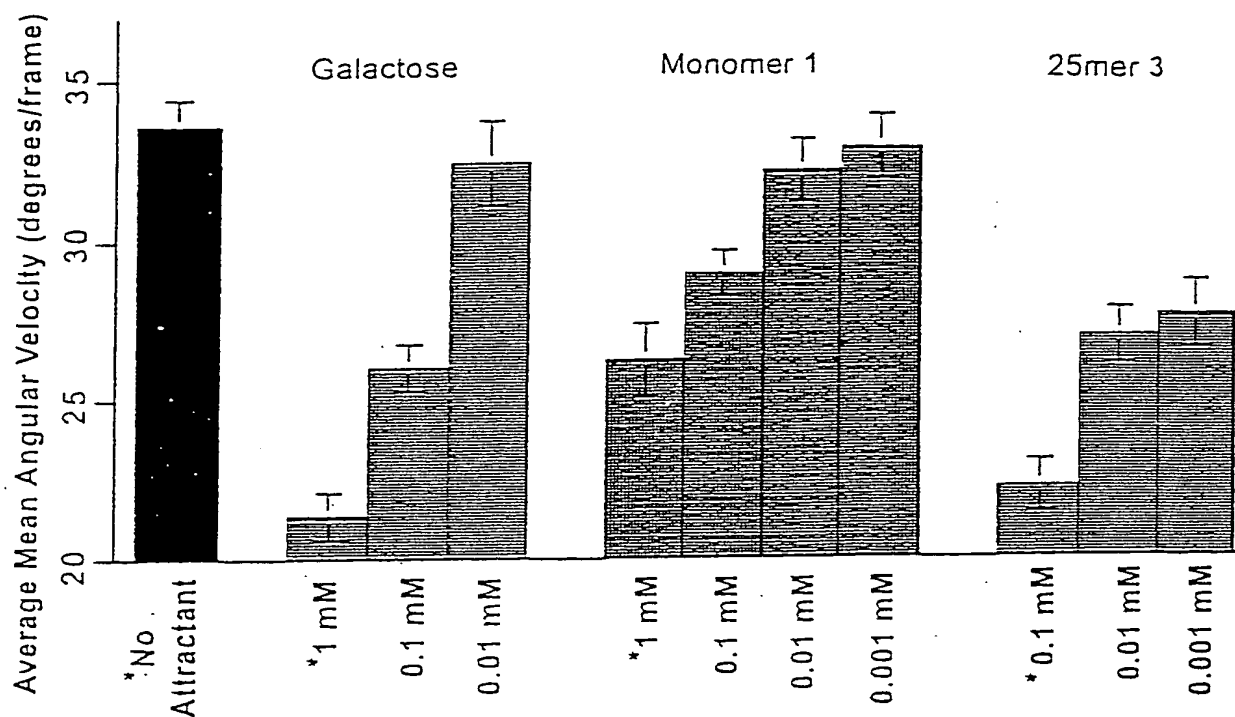


FIG. 2A



FIG. 2B



FIG. 2C

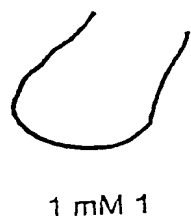


FIG. 2D

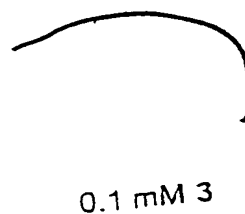


FIG. 2E

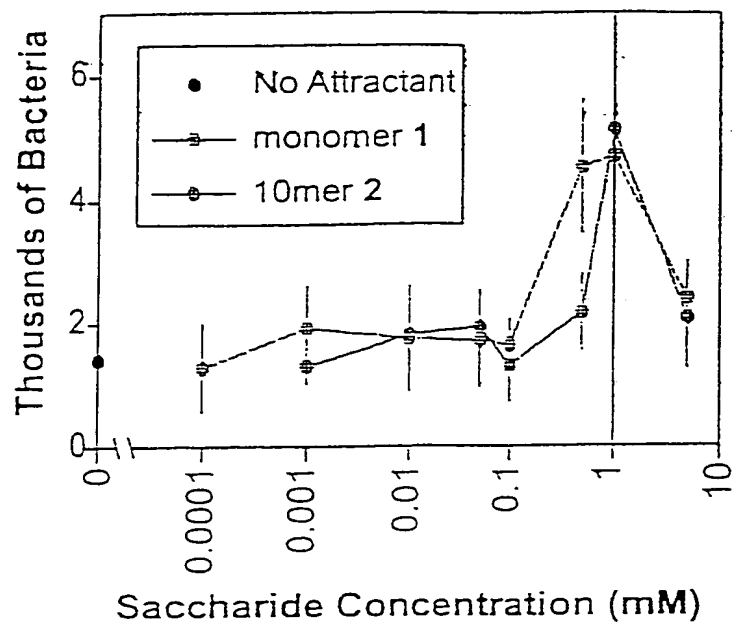


FIG. 3A

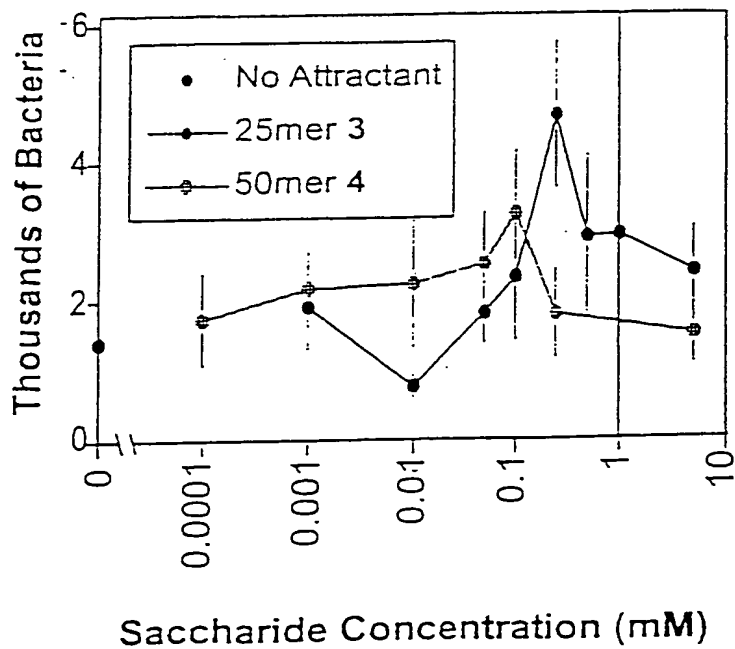


FIG. 3B

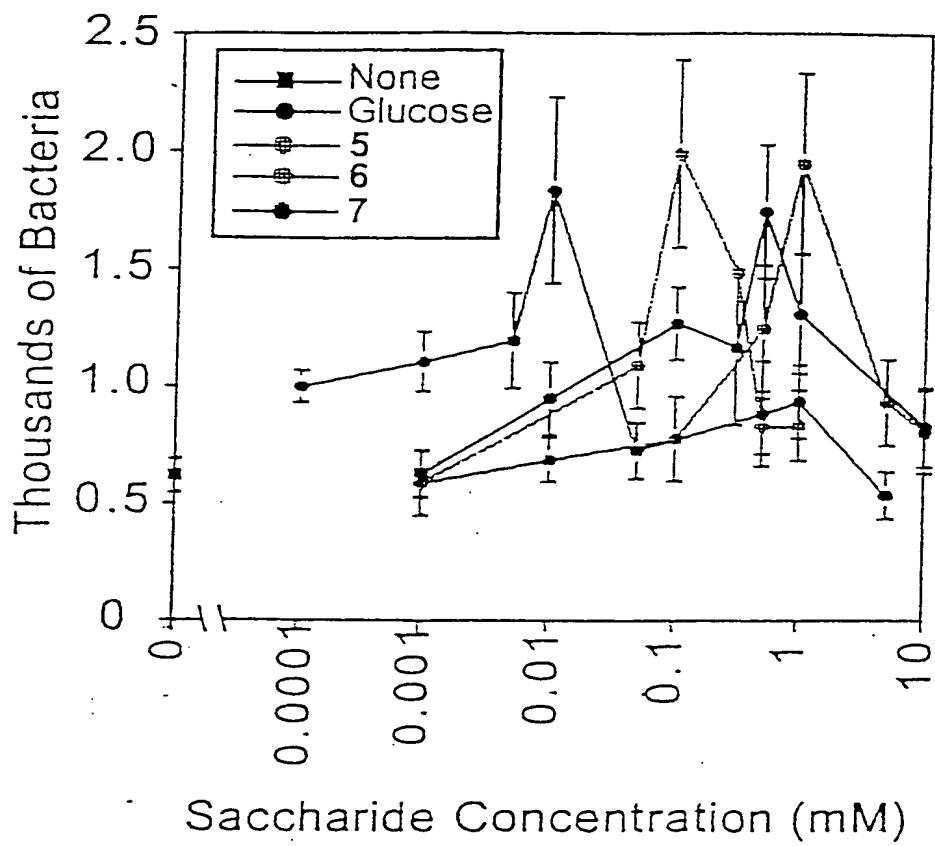


FIG. 4

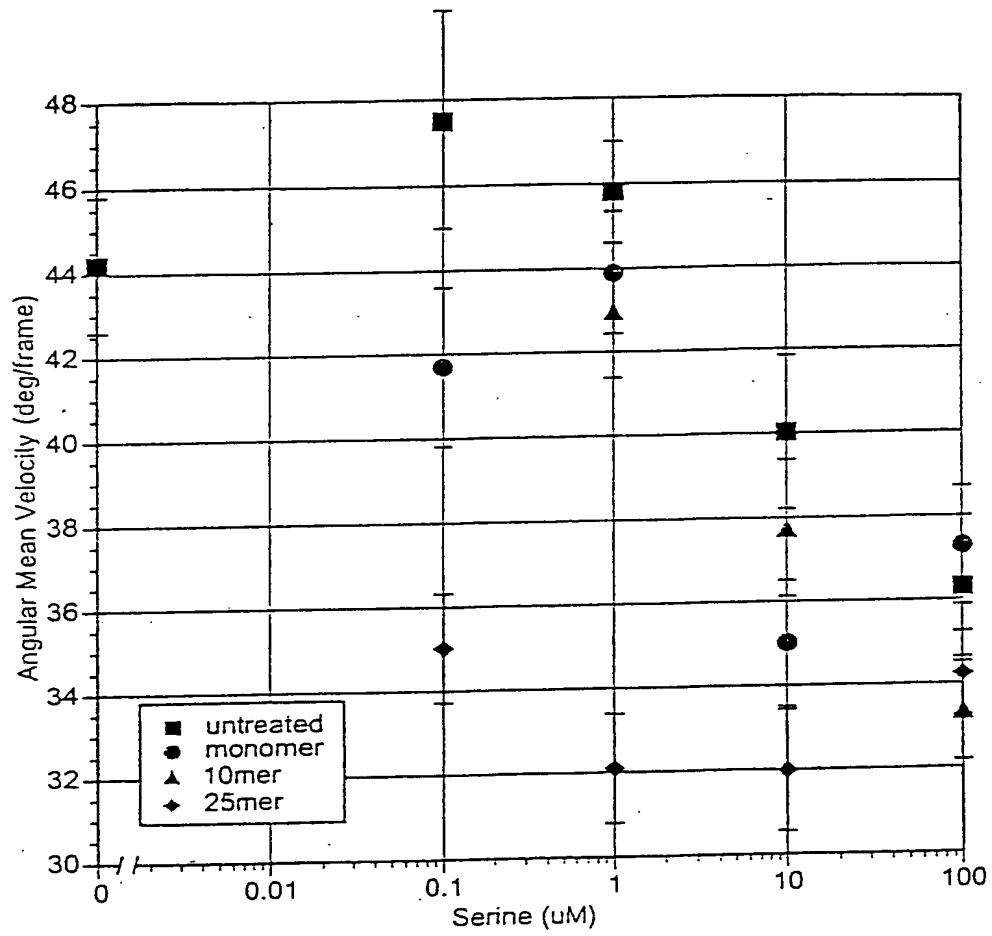


FIG. 5A

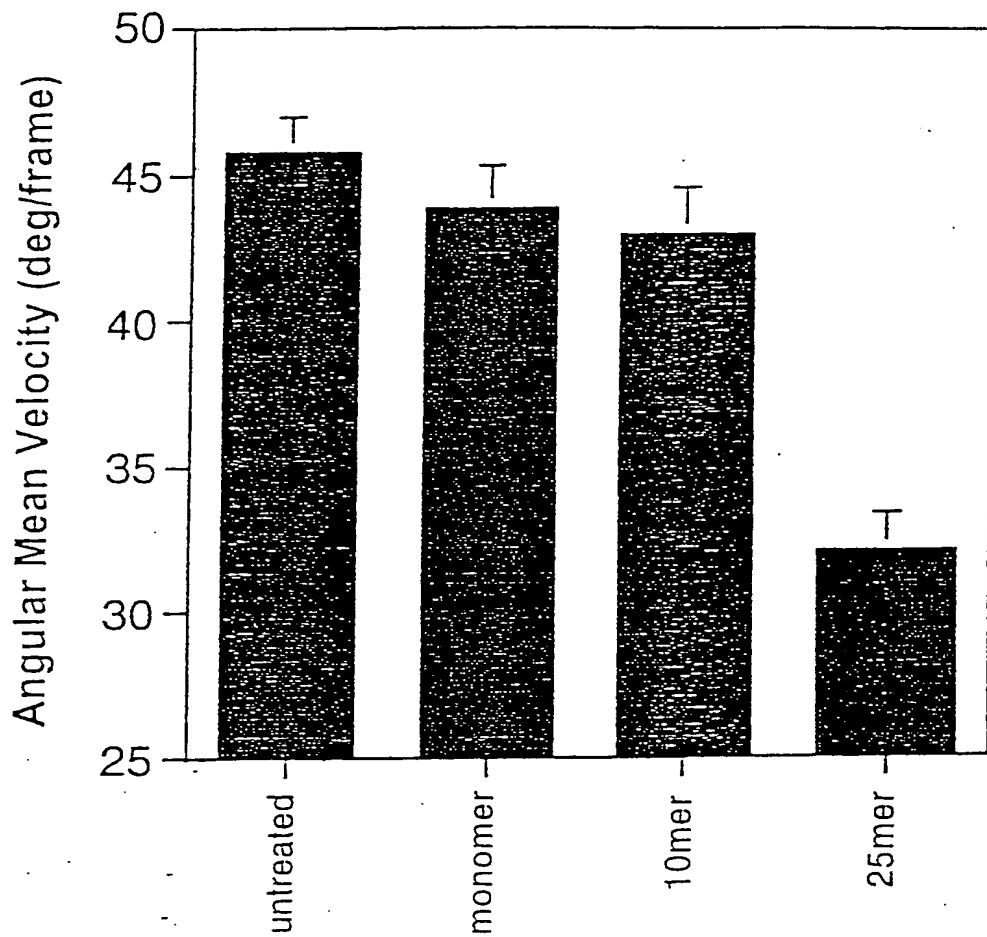


FIG. 5B

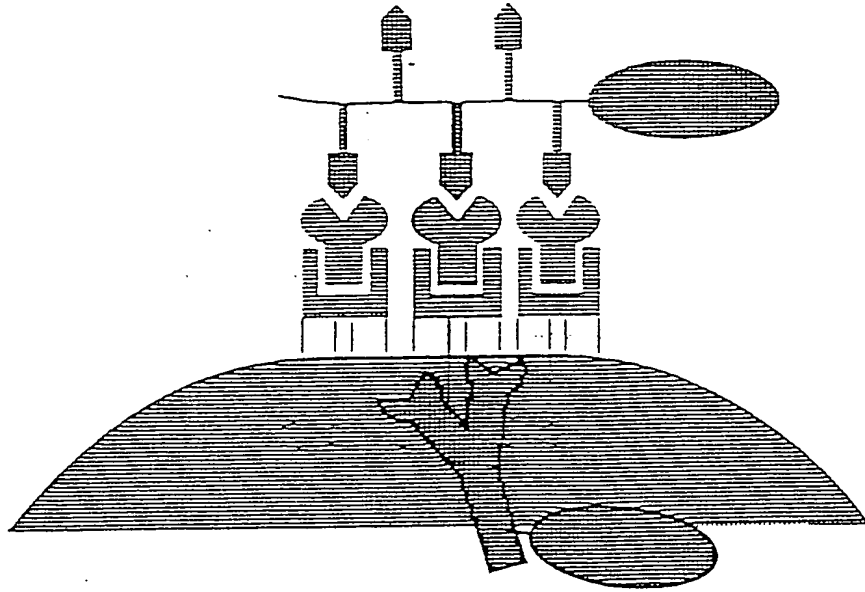


FIG. 6

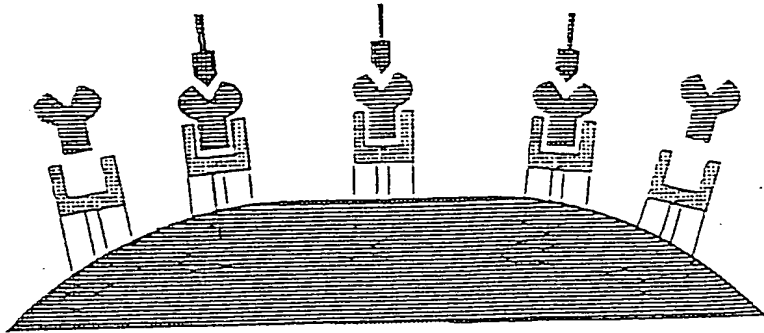


FIG. 7A

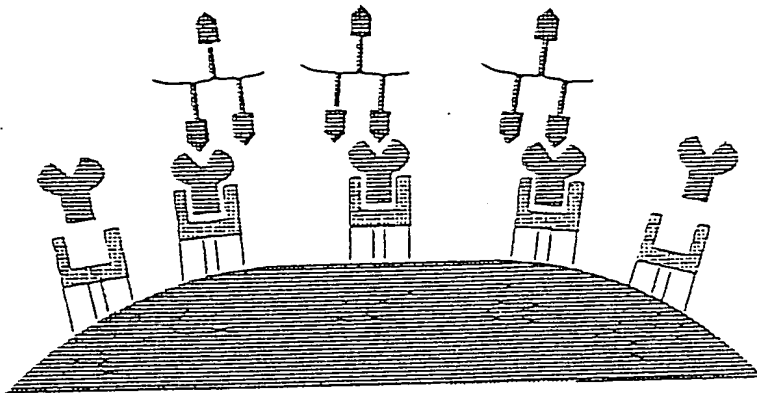


FIG. 7B

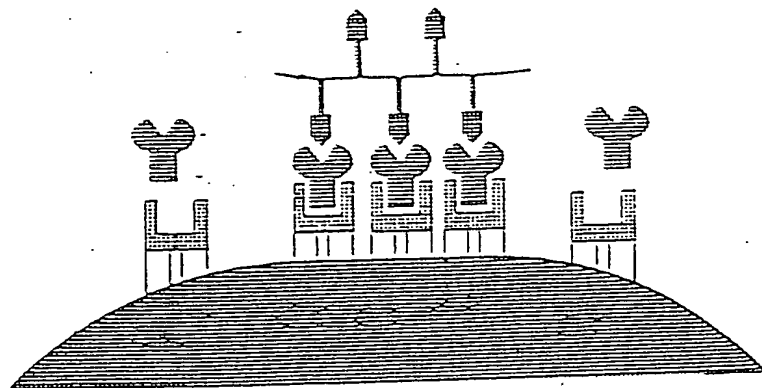


FIG. 7C

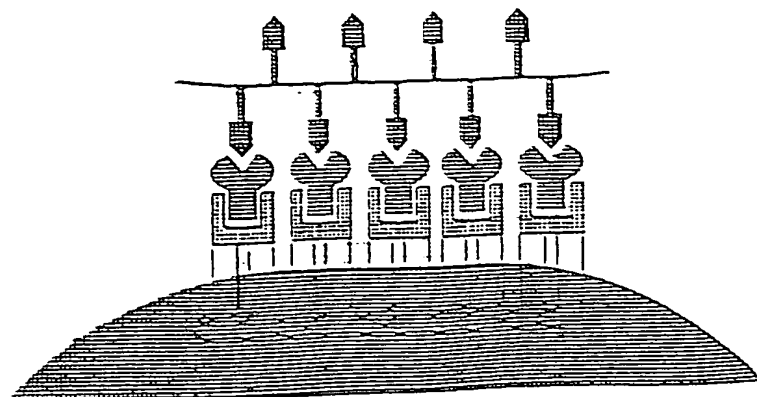


FIG. 7D

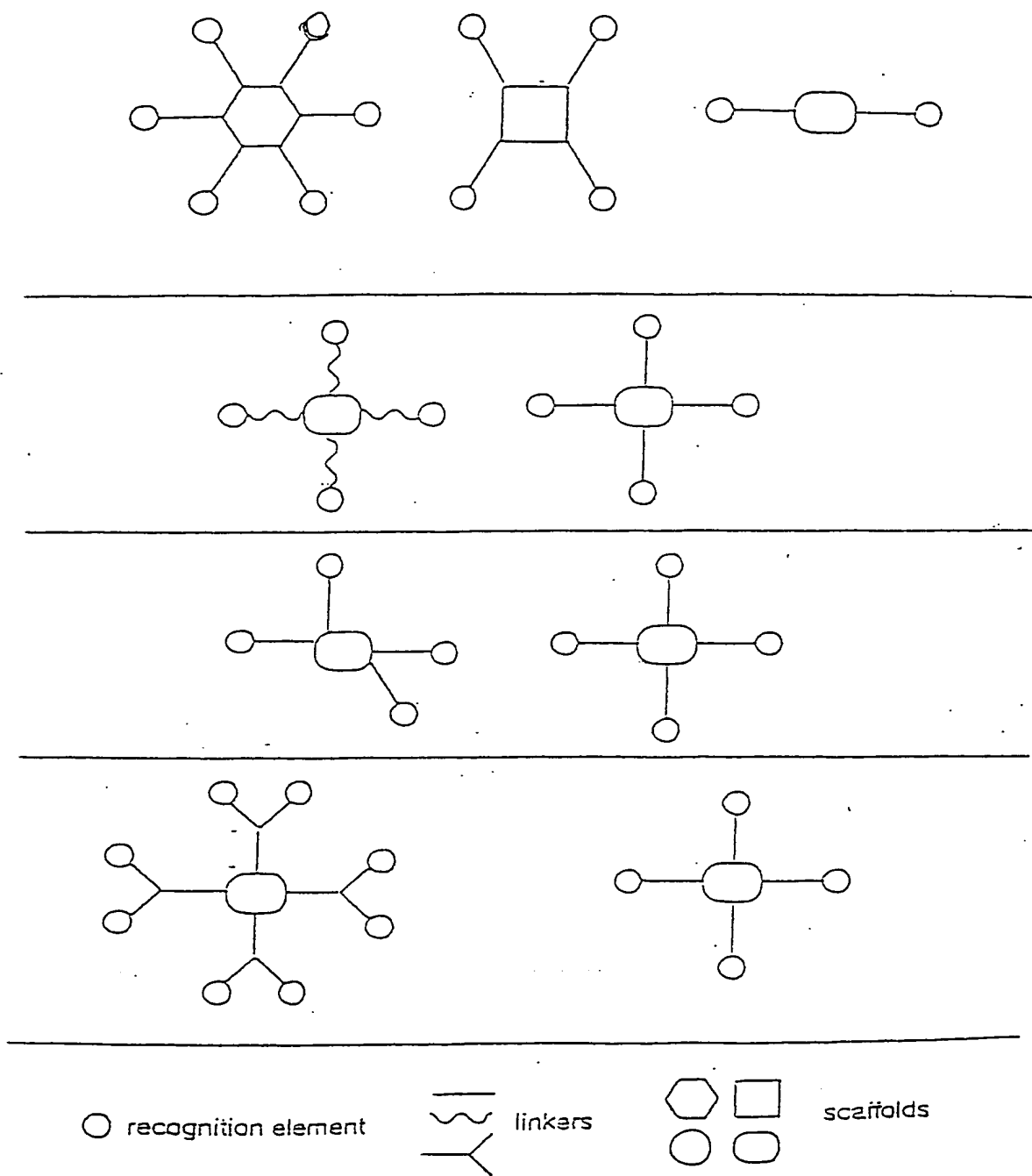


FIG. 8

FIG. 9A

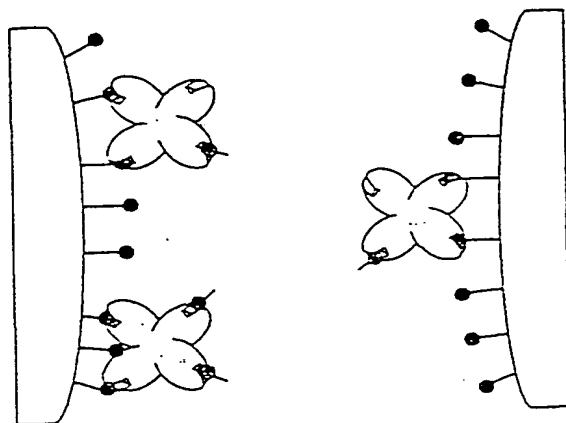


FIG. 9B

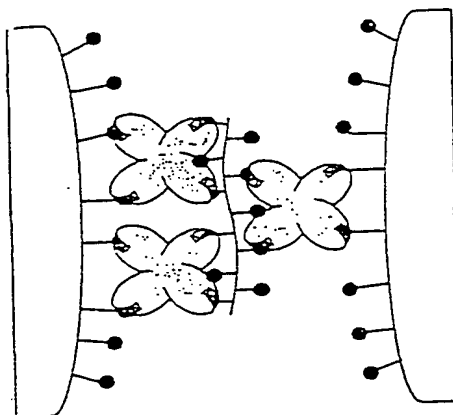
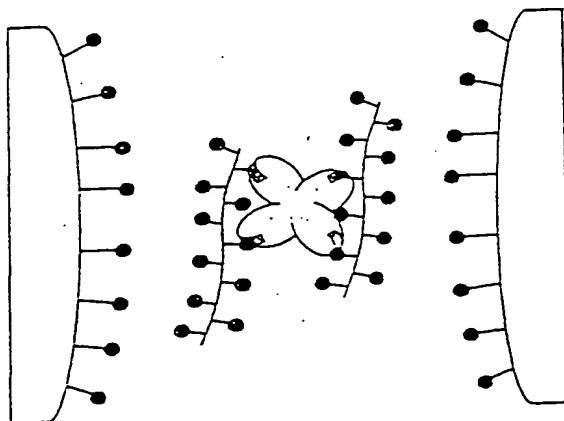


FIG. 9C



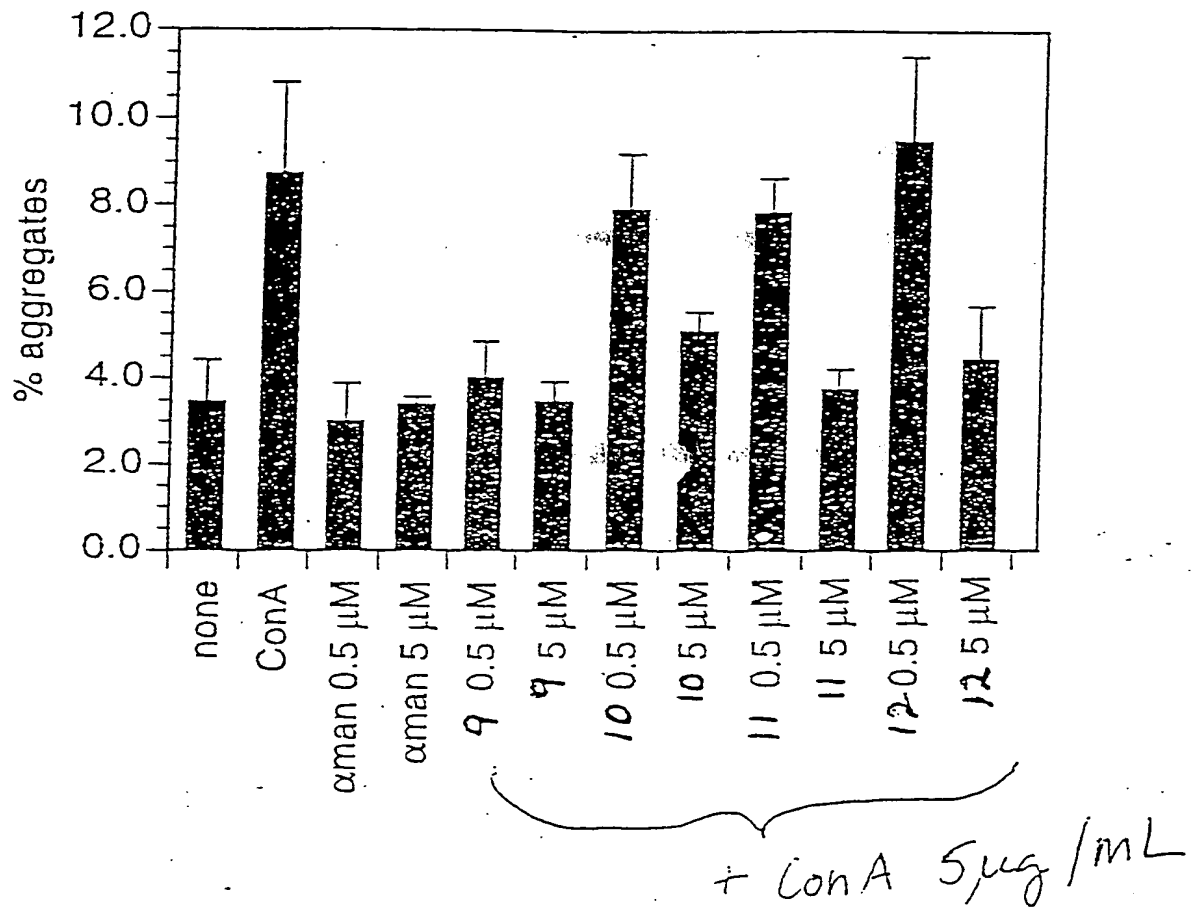


FIG. 10

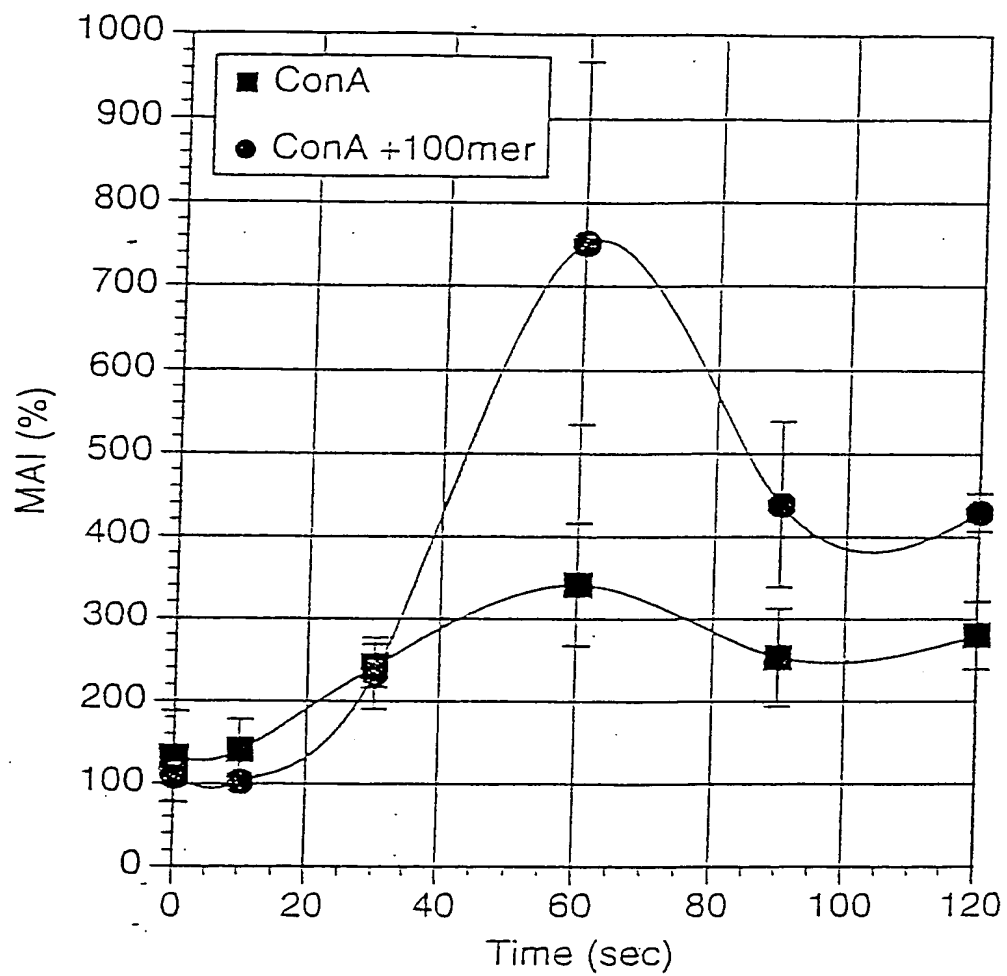


FIG. 11

Potentialiation of ConA Toxicity by a Multivalent Ligand

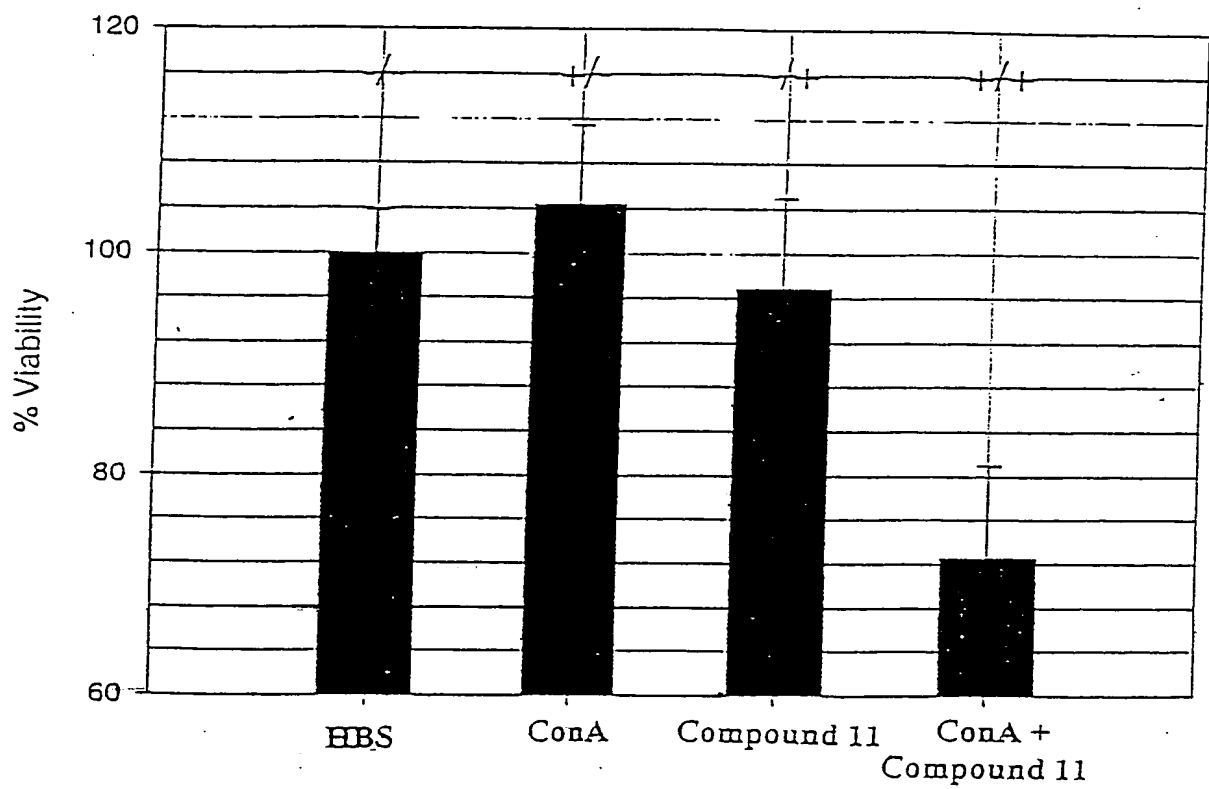


FIG. 12

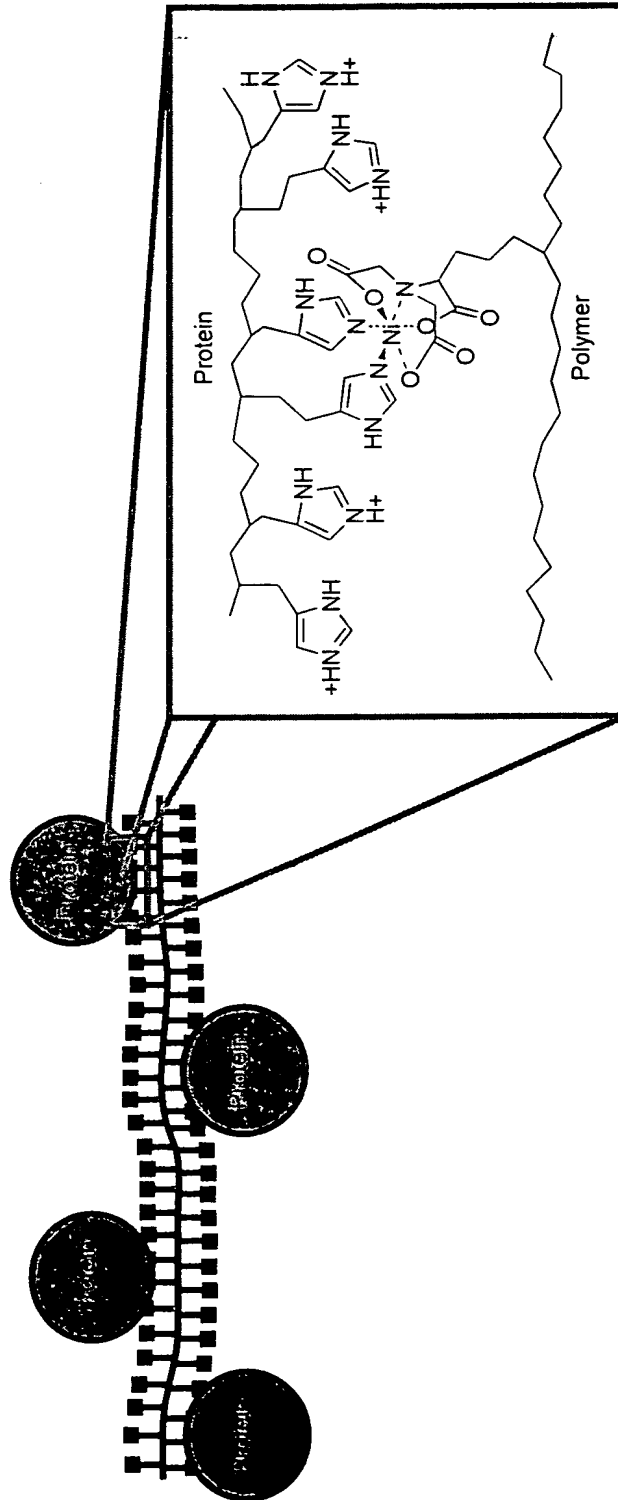


FIG. 13

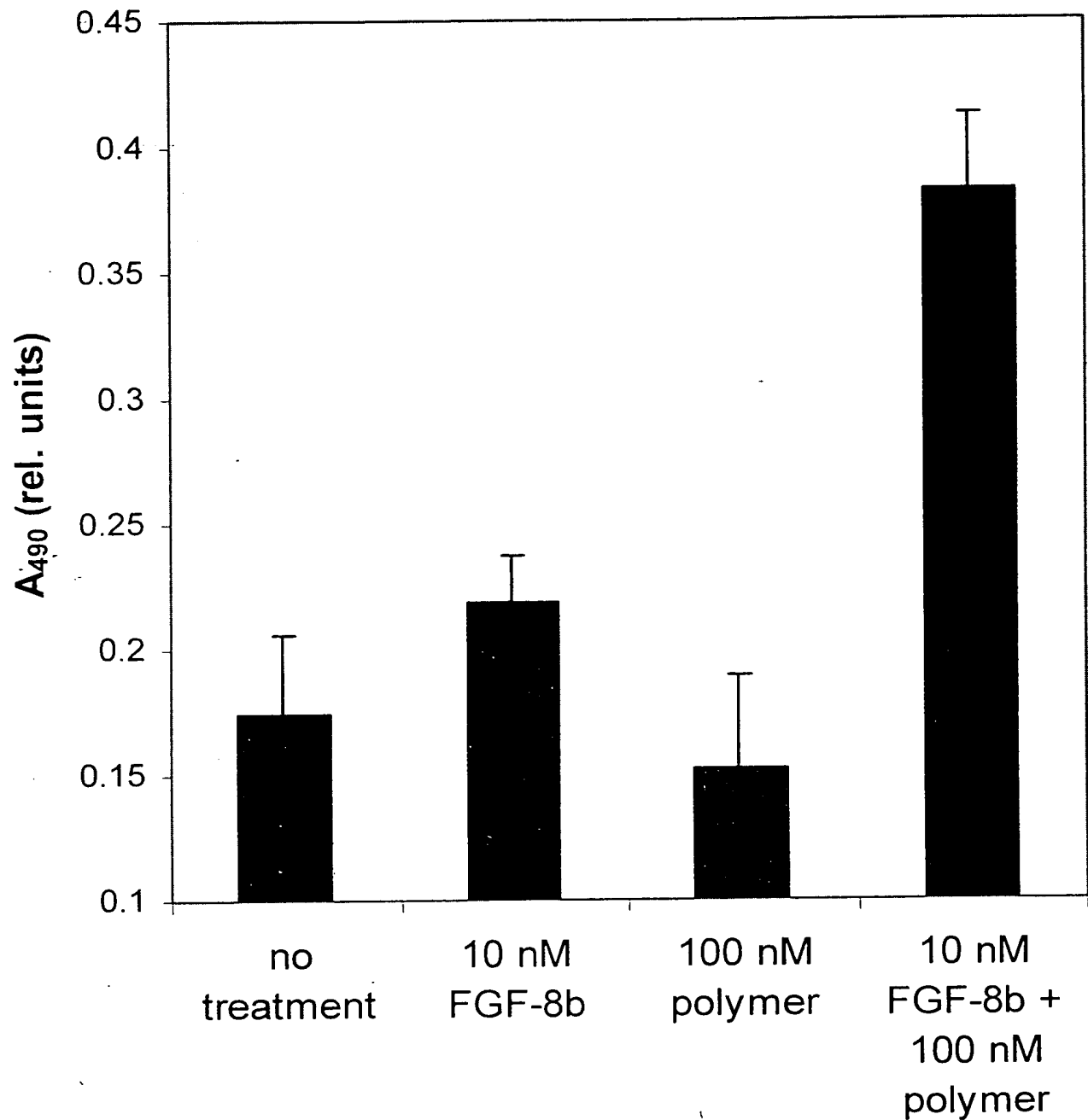


FIG. 14

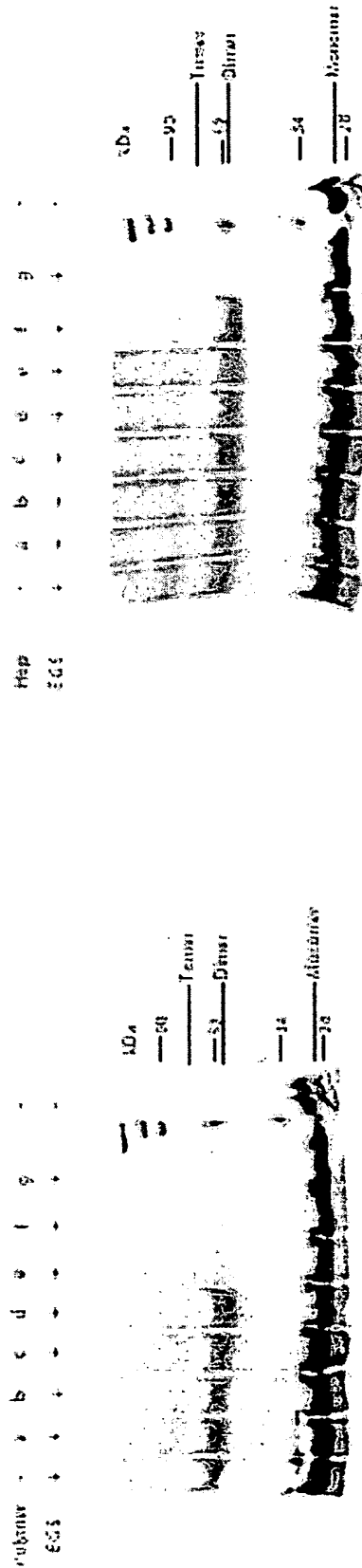


FIG. 15B

FIG. 15A

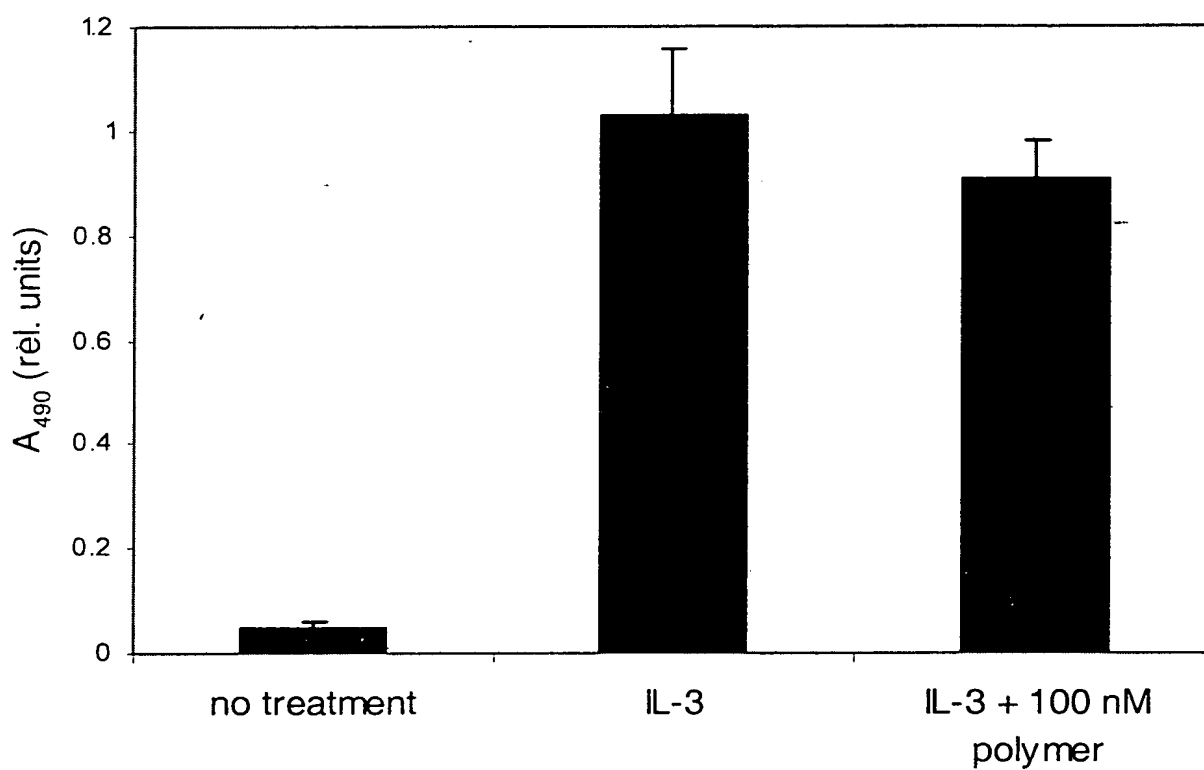


FIG. 16

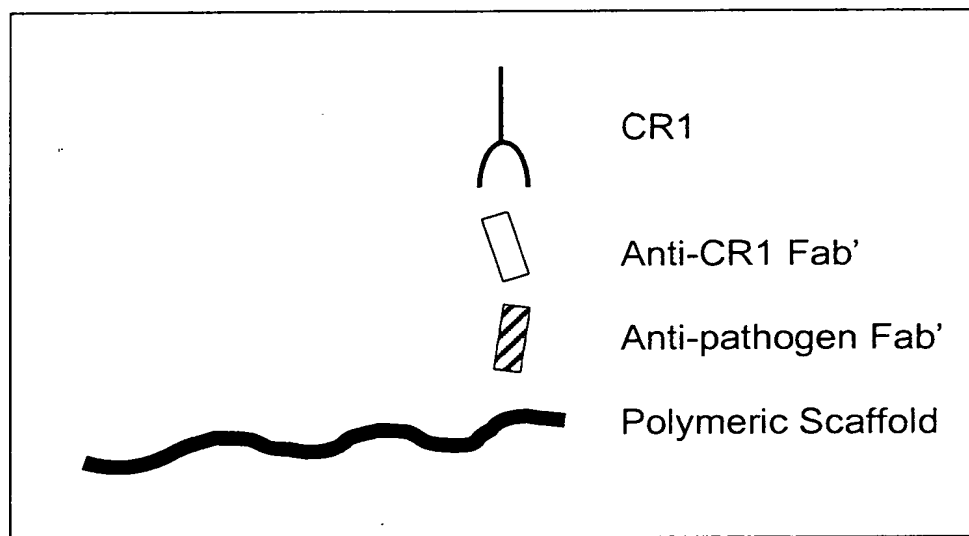
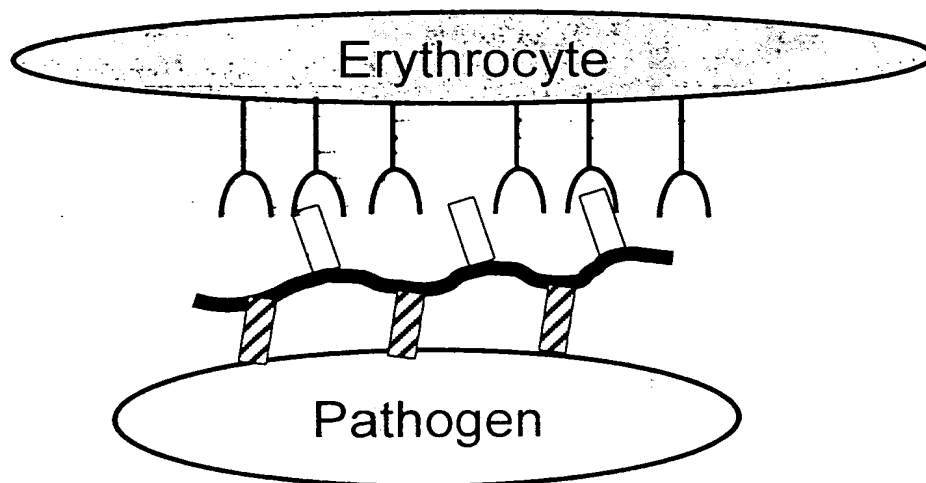


FIG. 17

Immune adherence mediated by bifunctional conjugate based on a linear polymeric scaffold.

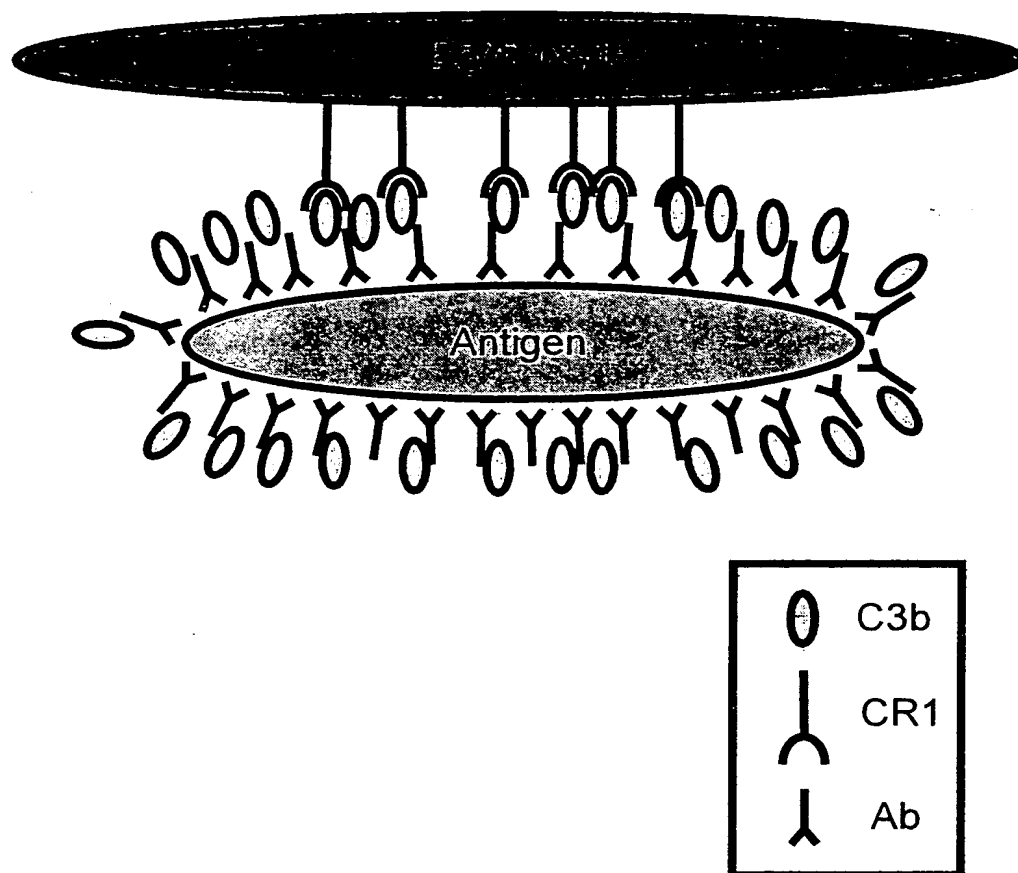


Illustration of immune adherence

FIG. 18

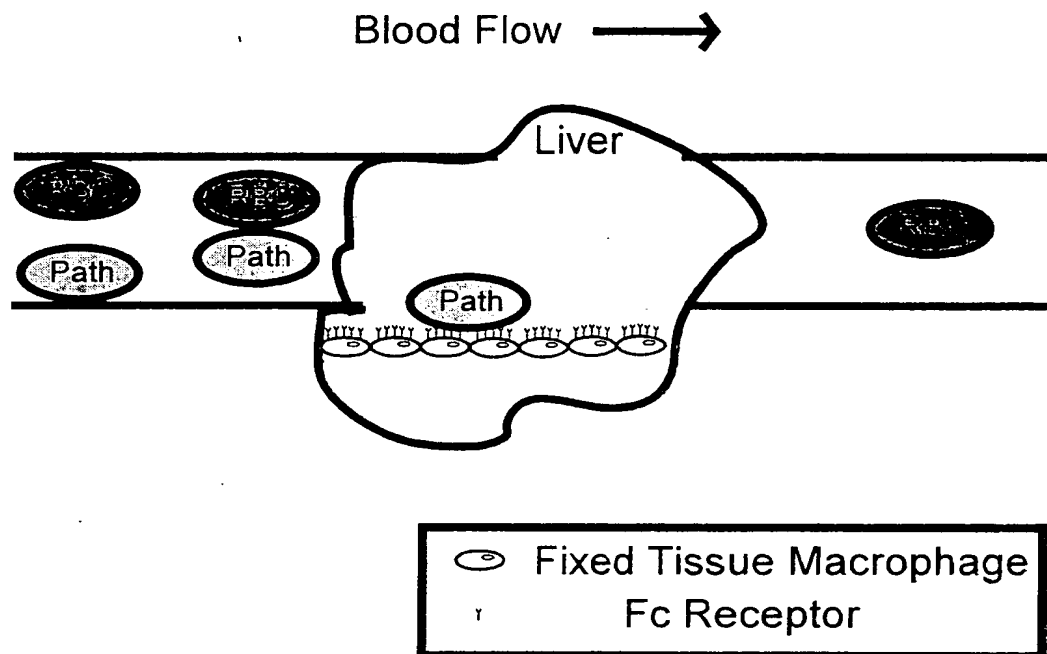
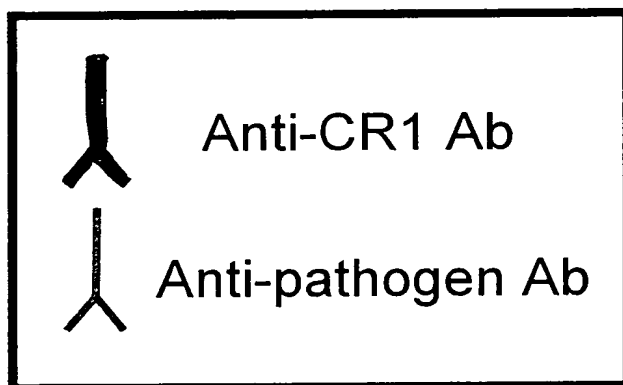
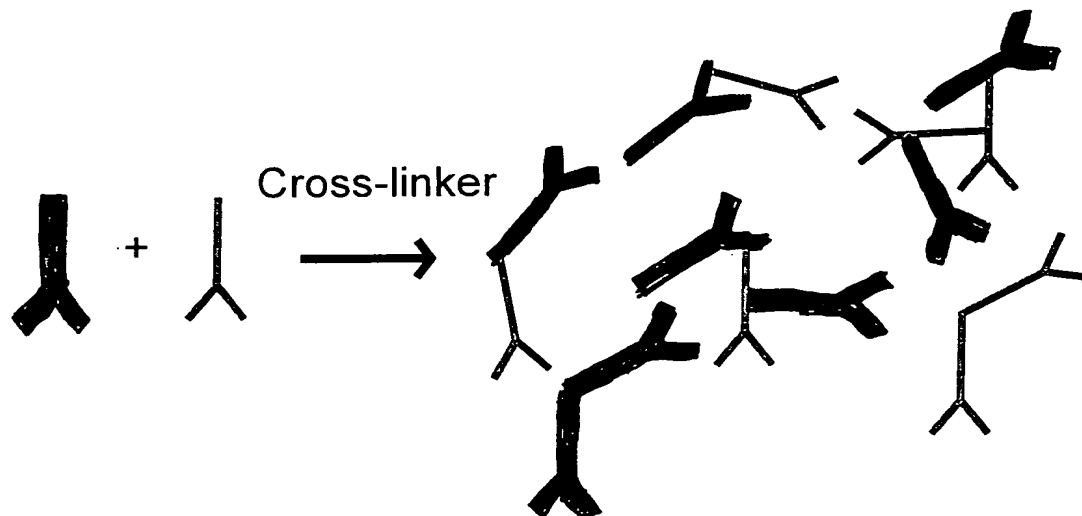


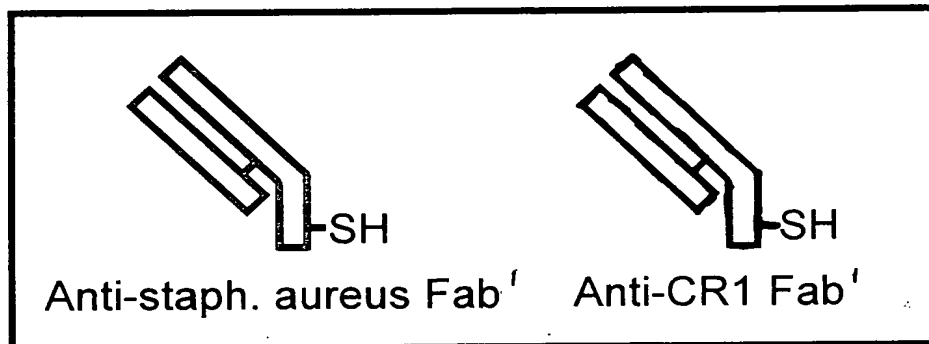
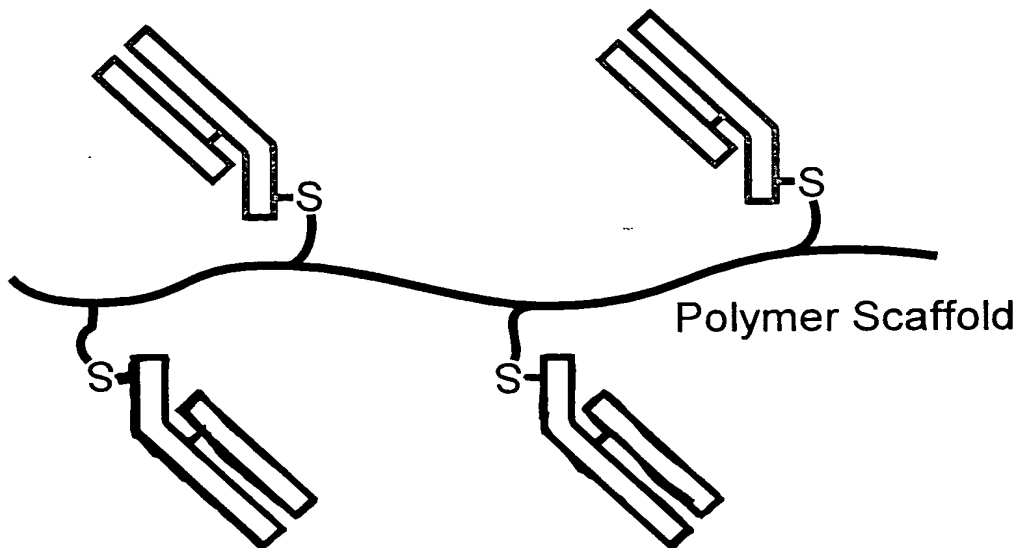
Illustration of Pathogen clearance mediated by immune adherence

FIG. 19



Non-specifically cross-linked bispecific antibodies for pathogen clearance (from Taylor et al.)

FIG. 20



Fab' fragments of two different specificities conjugated to a polymeric scaffold chemoselectively

FIG. 21

FIG. 22A

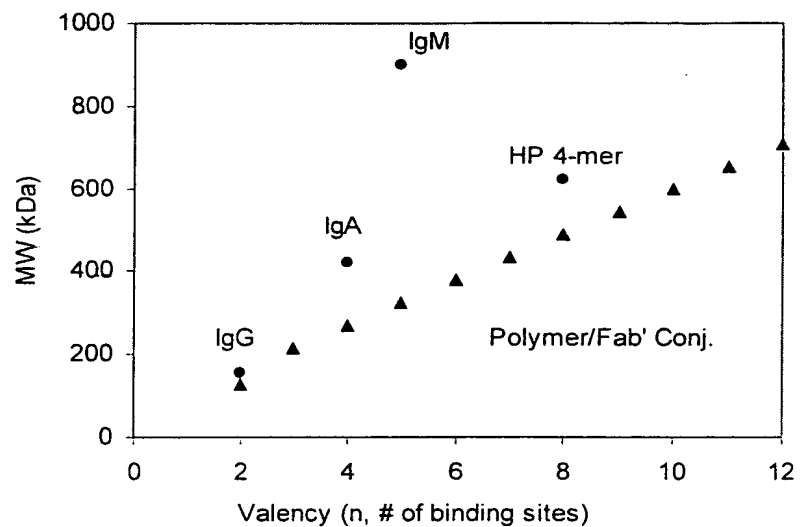
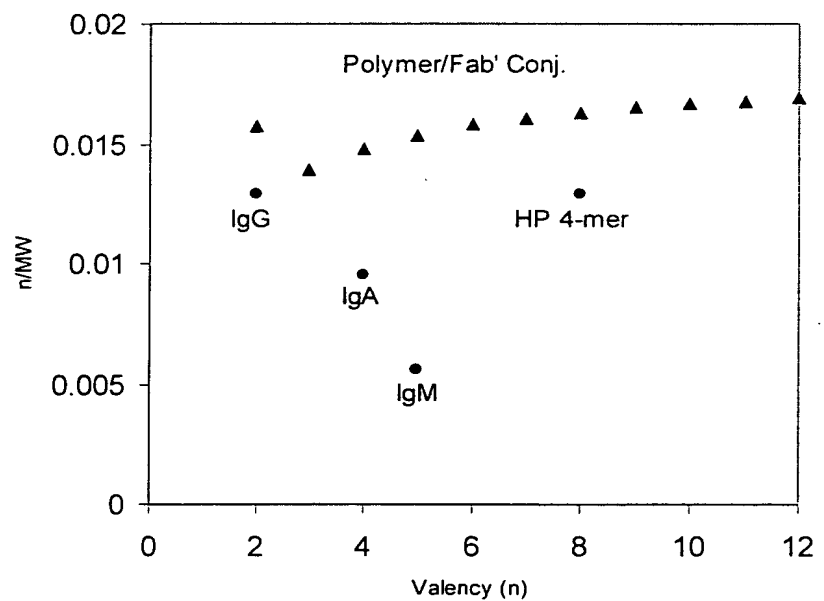
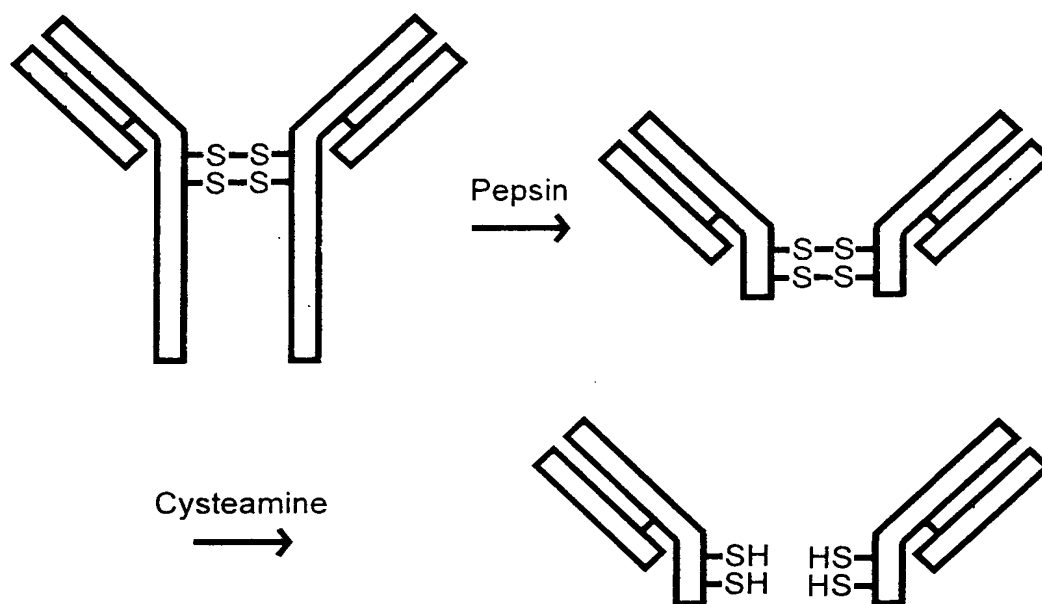


FIG. 22B



Comparison of our conjugates with existing antibody-based conjugates (a) Molecular weight versus valency (# of binding epitopes) (b) Binding site density versus valency



Standard preparation of Fab' fragments from IgG

FIG. 23

FIG. 24B

(b) Chemospecificity Control Conjugation

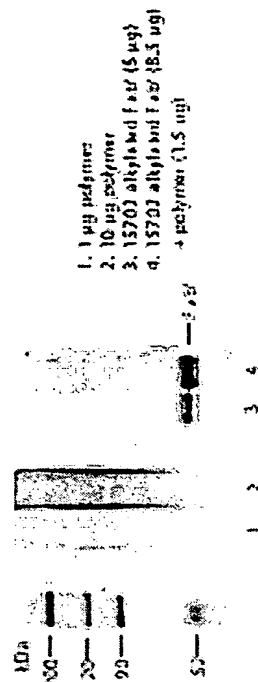
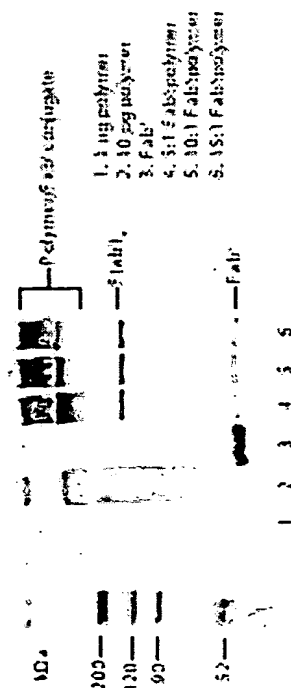


FIG. 24A

(a) Conjugation Optimization



Fab'/polymer conjugations a.) The top gel demonstrates that the "150-mer" can accommodate at least 9-10 Fab' fragments b.) the bottom gel demonstrates that the conjugation is completely chemoselective